

***Montana Fish, Wildlife and Parks***

Region 7

P.O. Box 1630, Miles City, MT 59301

(406) 234-0900

**ENVIRONMENTAL ASSESSMENT CHECKLIST**

**PART 1. PROPOSED ACTION DESCRIPTION**

Project Title: Pumpkin Creek Willow Soil Lift Bank Stabilization Project

Application Date: 1/14/13

Name, Address and Phone Number: Caleb Bollman

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Miles City, MT 59301

(406) 234-0924

Project Location: Portion of Pumpkin Creek within Twelve Mile Fishing Access Site which is located 12 miles south of Miles City on Highway 59 and 1 mile SW on Tongue River Road (Hwy 332). Township 6 N, Range 48 E, Section 29.

**Description of Project:**

Fish, Wildlife & Parks is proposing a project to stabilize a portion of the Pumpkin Creek bank that significantly eroded during flooding and high water events in the spring of 2011. The high water and flooding caused the creek bank to erode and wash out the access road within Twelve Mile FAS. We would like to stabilize this portion of the Pumpkin Creek bank to prevent future erosion issues within this site.

The proposed stabilization project will use a soft armoring technique called "soil lifting". The purpose of this method is to use natural material and vegetation to stabilize the bank. This method was chosen due to high costs of traditional rip rap and also for the benefits it provides to fish and wildlife habitat.

The project proposal is to cut back the eroded bank to a slope of 2:1 and then establish a conifer slash fascine toe at the bottom of the slope, underlain with a biodegradable woven coir fabric. A layer of top soil will then be placed on the newly sloped bank and a soil erosion fabric will be staked down on top of the soil. Dormant willow sprigs will then be placed over the soil erosion fabric and covered with an additional layer of top soil. We anticipate doing a couple layers of the

willow sprigs and top soil to achieve the “soil lift”. All material excavated while sloping the bank back will be kept on site and will be placed back on the slope during the soil lifting project. Additional top soil may need to be brought in. The project will take place during low flow periods in order to minimize additional erosion, sedimentation and turbidity. The entire project site will then be seeded with a Department approved grass mixture.

Photos of the project site:



**Other groups or agencies contacted or which may have overlapping jurisdiction:**

N/A

## **PART 2. ENVIRONMENTAL REVIEW**

Table 1. Potential impact on physical environment.

Will the proposed action result in potential impacts to:	Unknown	Potentially Significant	Minor	None	Can Be Mitigated	Comments Provided
1. Unique, endangered, fragile, or limited environmental resources				X		
2. Terrestrial or aquatic life and/or habitats			X		Positive	Yes
3. Introduction of new species into an area				X		
4. Vegetation cover, quantity and quality			X		Positive	Yes
5. Water quality, quantity and distribution (surface or groundwater)			X		Positive	Yes
6. Existing water right or reservation				X		
7. Geology and soil quality, stability and moisture				X		
8. Air quality or objectionable odors				X		
9. Historical and archaeological sites				X		
10. Demands on environmental resources of land, water, air & energy				X		
11. Aesthetics			X		Positive	Yes

### **Comments**

(A description of potentially significant, or unknown, impacts and potential alternatives for mitigation must be provided.)

1.2: Once the vegetation is established on the slope of the bank, both terrestrial and aquatic species will benefit. The willow and grass plantings will provide additional cover habitat for species such as small mammals and upland game birds. The willow and grass plantings will also provide additional cover and forage for aquatic species during higher flows.

1.4: Since the bank eroded so rapidly, this particular section on Pumpkin Creek is barren of all vegetation. The proposed project will re-establish vegetation with a willow and grass mixture. Without the re-establishment of vegetation on this site, the potential exists for a large noxious weed infestation. Re-establishment of vegetation will help to reduce any noxious weed infestations and overall improve the vegetative quality of the site.

1.5: The establishment of willow and grasses on the stream bank will decrease sedimentation and erosion and improve surface water quality.

1.11: This project will improve the aesthetics and overall safety of this site. Currently the bank has a nine foot vertical drop along the entire length of the project site and is barren of vegetation. This bank stabilization project will slope the bank back to provide a safer area for the recreating public as well as provide vegetation that is more aesthetically pleasing than a barren, vertical bank.

Table 2. Potential impacts on human environment.

Will the proposed action result in potential impacts to:	Unknown	Potentially Significant	Minor	None	Can Be Mitigated	Comments Provided
1. Social structures and cultural diversity				X		
2. Changes in existing public benefits provided by wildlife populations and/or habitat			X			
3. Local and state tax base and tax revenue				X		
4. Agricultural production				X		
5. Human health				X		
6. Quantity and distribution of community and personal income				X		
7. Access to and quality of recreational activities		X			Positive	Yes
8. Locally adopted environmental plans & goals (ordinances)				X		
9. Distribution and density of population and housing				X		
10. Demands for government services				X		
11. Industrial and/or commercial activity				X		

## **Comments**

(A description of potentially significant, or unknown, impacts and potential alternatives for mitigation must be provided as comments.)

2.2: Improving the habitat through this reach of stream could increase the availability of game species such as pheasants for public benefit.

2.7: At the present time, the steep/vertical bank poses a potentially dangerous hazard to the public. The bank has a nine foot vertical drop that could potentially cause injury, should someone fall over. Upon completion of the project, this stretch of Pumpkin Creek will be more readily accessible to the recreating public, without the dangers associated with a steep bank. The re-establishment of vegetation will also provide additional food and cover for terrestrial and aquatic species at Twelve Mile Fishing Access Site, increasing recreational opportunities for activities such as fishing, hunting, bird-watching and hiking.

**Does the proposed action involve potential risks or adverse effects which are uncertain but extremely harmful if they were to occur?**

No significant risks are currently known.

**Does the proposed action have impacts that are individually minor, but cumulatively significant or potentially significant?**

Risks as described in this question are not anticipated.

**Description and analysis of reasonable alternatives (including the no action alternative) to the proposed action when alternatives are reasonably available and prudent to consider. Include a discussion of how the alternatives would be implemented:**

No action – Bank will continue to erode during high water events.

Rip Rap – While this alternative would provide bank protection, it is not a cost effective alternative and does not provide the resource benefit of soil stabilization that natural vegetation does.

**Evaluation and listing of mitigation, stipulation, or other control measures enforceable by the agency or another government agency:**

This section provides an analysis of impacts to private property by proposed restrictions or stipulations in this EA as required under 75-1-201, MCA, and the Private Property Assessment Act, Chapter 462, Laws of Montana (1995). The analysis provided in this EA is conducted in accordance with implementation guidance issued by the Montana Legislative Services Division (EQC, 1996). A completed checklist designed to assist state agencies in identifying and evaluating proposed agency actions, such as imposed stipulations, that may result in the taking or damaging of private property, is included in Appendix A.

**Individuals or groups contributing to, or commenting on, this EA checklist:**

**EA checklist prepared by and comment (via email or mail) to:**

Caleb Bollman  
Region 7 Fisheries Biologist  
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Miles City, MT 59301  
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**Date Completed:**

January 14, 2013

**Comment by:**

January 31, 2013

## APPENDIX A

### PRIVATE PROPERTY ASSESSMENT ACT CHECKLIST

The 54th Legislature enacted the Private Property Assessment Act, Chapter 462, Laws of Montana (1995). The intent of the legislation is to establish an orderly and consistent process by which state agencies evaluate their proposed actions under the "Takings Clauses" of the United States and Montana Constitutions. The Takings Clause of the Fifth Amendment of the United States Constitution provides: "nor shall private property be taken for public use, without just compensation." Similarly, Article II, Section 29 of the Montana Constitution provides: "Private property shall not be taken or damaged for public use without just compensation..."

The Private Property Assessment Act applies to proposed agency actions pertaining to land or water management or to some other environmental matter that, if adopted and enforced without compensation, would constitute a deprivation of private property in violation of the United States or Montana Constitutions.

The Montana State Attorney General's Office has developed guidelines for use by state agency to assess the impact of a proposed agency action on private property. The assessment process includes a careful review of all issues identified in the Attorney General's guidance document (Montana Department of Justice 1997). If the use of the guidelines and checklist indicates that a proposed agency action has taking or damaging implications, the agency must prepare an impact assessment in accordance with Section 5 of the Private Property Assessment Act. For the purposes of this EA, the questions on the following checklist refer to the following required stipulation(s):

### DOES THE PROPOSED AGENCY ACTION HAVE TAKINGS IMPLICATIONS UNDER THE PRIVATE PROPERTY ASSESSMENT ACT?

YES	NO	
_____	<u>  X  </u>	1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
_____	<u>  X  </u>	2. Does the action result in either a permanent or indefinite physical occupation of private property?
_____	<u>  X  </u>	3. Does the action deprive the owner of all economically viable uses of the property?
_____	<u>  X  </u>	4. Does the action deny a fundamental attribute of ownership?
_____	<u>  X  </u>	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If the answer is <b>NO</b> , skip questions 5a and 5b and continue with question 6.]
_____	_____	5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
_____	_____	5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?

_____	<u>  X  </u>	6. Does the action have a severe impact on the value of the property?
_____	<u>  X  </u>	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally? [If the answer is <b>NO</b> , do not answer questions 7a-7c.]
_____	_____	7a. Is the impact of government action direct, peculiar, and significant?
_____	_____	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged, or flooded?
_____	_____	7c. Has government action diminished property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?

Taking or damaging implications exist if **YES** is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if **NO** is checked in response to questions 5a or 5b.

If taking or damaging implications exist, the agency must comply with Section 5 of the Private Property Assessment Act, to include the preparation of a taking or damaging impact assessment. Normally, the preparation of an impact assessment will require consultation with agency legal staff.